## MODEL NO. TPR-955H,E,K,G

# AIWA® (SERVICE MANUAL)

Code No. 03-955-000-53



Shown above is TPR-955H

DATE OF ISSUE 5/1980

H, G model 44 ± 4 dB (at 600, 1,000, 1,400 kHz)

#### SPECIFICATIONS

GENERAL	
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H, G model 11 ICs, 54 transistors, 1 FET, 34 diodes, 5 LED's E, K model

E, K model 11 ICs, 56 transistors, 1 FET, 34 diodes, 5 LED's Batteries DC 9 V (UM-1 x 6) H, E model: AC 110 ~ 120V/220 ~ 240V K, G model: AC 120V/240V

K, G model: AC 120V; (switchable) 50--60 Hz H model 19W E model 17W K model 20W G model 23W

Woofer 160 mm¢ x 2 Tweeter 52 mm¢ x 2 490 x 370 x 130 (mm)

ens (W x H x D):

RADIO SECTION

H, G model FM 87.0 ~ 109.0 MHz SW, 6.8 ~ 22.5 MHz SW, 2.1 ~ 7.3 MHz MW 515 ~ 1,650 kHz requency range;

E, K model FM 87.4 ~ 108.3 MHz SW 5,7 ~ 18.5 MHz

SW 5.7 ~ 18.5 MHz MW 515 ~ 1,650 kHz LW 145 ~ 320 kHz FM 10.7 MHz SW, SW<sub>3</sub>, SW<sub>1</sub>, MW, LW H, G model: 455 kHz E, K model: 468 kHz FM (S/N 6 dB) Intermediate frequency:

Sensitivity:

FM (S/N 8 d8) 4 ± 3 d8 (at 85,98,108 MHz) 5W (S/N 10 d8) 26 ± 5 d8 (at 5.9 MHz) 72 ± 5 d8 (at 12 MHz) 15 ± 5 d8 (at 12 MHz) 5W, (S/N 10 d8) 28 ± 6 d8 (at 7 MHz) 75 + 5 d8 (at 7 MHz)

MW (S/N 10 dB)

FM stereo sep Antennes:

25 ± 5 dB (at 1 kHz) H.G model Built-in whip antenna for FM, SW, Built-in ferrite bar antenna for SW, MW

E, K model 43 ± 4 dB (at 600 kHz) 42 ± 4 dB (at 1,000,1,400 kHz) LW (S/N 10 dB)

External antenna terminals for FM E, K model

52 ± 5 dB (at 150 kHz) 50 ± 5 dB (at 220,300 kHz)

Built-in whip antenna for FM, SW Built-in ferrite bar antenna for MW. LW

nal antenna terminals for FM TAPE RECORDER SECTION

AC bias AC erase 54.5 ± 1 kHz Erasing syst

Less than 1.7% (PB) Less then 3.0% (REC/PB)

Signal to noise ratio: (Un-Weighted)

Less than 3,0% (REC/PB)
H, G model
H, G model
Normal tape 40 - 12,500 Hz
E, M model
Normal tape 50 - 12,000 Hz
E, K model
Normal tape 50 - 12,000 Hz
E, K model
Normal tape 50 - 12,000 Hz
More than 50/47 dB
More than 50/47 dB
More than 50/47 dB
More than 53 dB (at 400 Hz)
Normal tape 50 - 12,000 Hz
Ferrite guard hand (F.G. H)
350 L 25g (3,43 ± 0.25 H)
S 95 ± 10 gcm (1.04 ± 0.1 H)
S 95 ± 10 gcm (1.04 ± 0.1 H)
S 95 ± 10 gcm (1.04 ± 0.1 H) Erasing ratio: Separation: Maximum output power:

Head: Pinch roller pressu Wow and Flutter: Take-up torque: 50 ± 10 g-cm (0.49 ± 0.1 mN·m) 100 +20 g-cm (0.98 +0.2 mN·m)

The specifications and external appearance of this set are



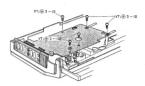
#### DISASSEMBLY INSTRUCTIONS

To Remove Back Cover
 Remove the 2 screws.
 (See figure 1)



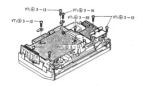
<Fig. 1>

## To Remove REC/PB Circuit Board Remove the 5 screws. (See figure 2)



< Fig. 2>

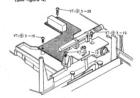
To Remove Main Case
 Remove the 8 screws.
 (See figure 3)



<Fig. 3>

#### 4. To Remove Tuner Circuit Board

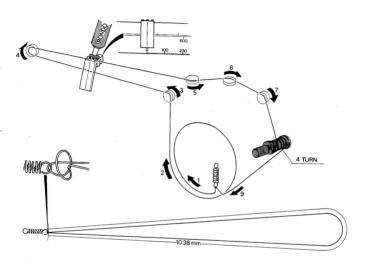
Remove the 4 screws.
 (See figure 4)



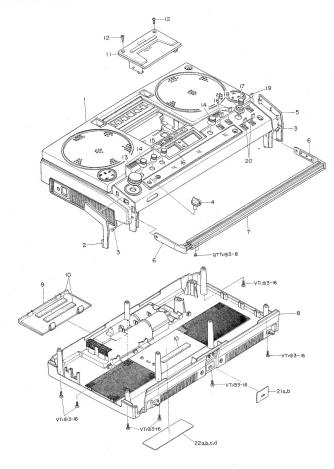
<Fig. 4>



### DIAL CORD STRINGING



#### EXPLODED VIEW-1





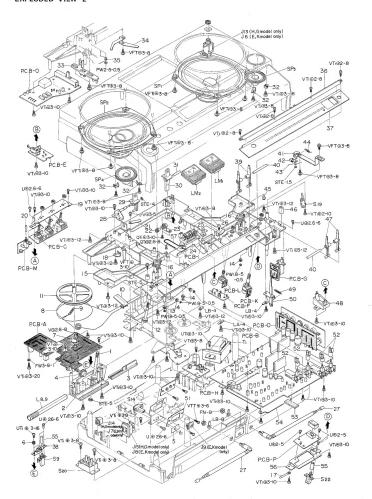
#### PARTS LIST

#### MECHANICAL PARTS

 \* mark in this part list shows exclusive part (which is used) for only Model TPR-955.

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty	
1-1a	09-017-789-01		Main cabinet ass'y (H.G model only)		1	
1-1b	09-017-788-01	1	Main cabinet ass'y (E,K model only)		1	
1-2	82-541-019-01	1	Panel,R, Side	TPR-950	1	ĺ
1-3	82-541-267-01	1 1	Shaft, Carrying handle	TPR-950	2	
1-4	82-541-025-01	1 1	Knob, band	TPR-950	1	
1-5	82-541-020-01		Panel L, Side	TPR-950	1 .	
1-6	82-534-013-01	1	Handle arm R		2	
1-7	82-541-013-01	1 1	Handle grip	TPR-950	1	
1-8	09-017-790-01	1 1	Back cover ass'y		1	ļ
1-9	82-541-003-01		Battery room lid	TPR-950	1	i
1-10	82-416-260-01		M cushion	TPR-601	. 3	
1-11	09-017-791-01		Cassette lid ass'y		1	
1-12	87-081-895-01	1	Allen screw 3-14		2	
1-13	82-538-041-01		Knob, Tuning		1	
1-14	82-560-013-01		Knob A, Volume		2	1
1-15	82-560-014-01		Knob B, Volume	•	2	
1-16	82-560-017-01		Knob A, Lever switch		2	
1-17	82-560-016-01	1	Knob D, Volume		1	
1-18	82-560-015-01	1 1	Knob C, Volume		1	
1-19	82-560-019-01	1	Knob, Sleep		1	
1-20	82-560-018-01	4	Knob, B, Lever switch		2	
1-218	82-541-094-01		Plate, Antenna (H, G model only)	TPR-950	1	
1-21b	82-541-075-01	1	Plate, Antenna (E, K model only)	TPR-950	1	
1-22a	82-573-009-01	1	Name plate, Spec. (H model only)	*	1	
1-22b	82-573-010-01	1	Name plate, Spec. (E model only)		1	
1-22c	82-573-011-01	1	Name plate, Spec. (K model only)		1	
1-22d	82-573-013-01	1	Name plate, Spec, (G model only)		1	

#### EXPLODED VIEW-2



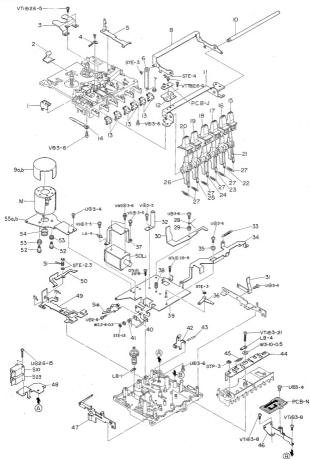


ef. No.	Part No.	Part No. Changed to	Description	Comn		
2-1	82-541-205-01		Gear C, Band selector	TPR-9	950 1	T
2-2	82-541-301-01		Chassis, Tuning	TPR-9	950 1	-
2-3	82-541-204-01		Gear B, Band selector	TPR-9	950 1	
2-4	82-541-203-01	-	Gear A, Band selector	TPR-9	950 1	
2-5	82-541-058-01		Himeron cloth, Antenna switch	TPR-9	950 1	
2-6	87-087-027-01		Rubber cushion		2	
2-7	82-439-311-01		Joint, Drum	TPR-3	300 1	
2-8	87-096-045-01		String, Dial		1 1	
2-9	82-534-290-01		E-spring, Tuning brum		1	
2-10	82-541-014-01		Pointer, Tuning	TPR-S	950 1	
2-11	82-439-310-01		Drum	TPR-S	300 1	
2-11	82-541-232-01		Shaft, Tuning	TPR-9		
2-12	81-302-107-01		Roller	11117	1	
2-13	81-385-014-01		Roller		4	
			Chassis, Radio	TPR-S		
2-15	82-541-201-01			l irns		
2-16	87-064-084-01		Holder, ECM		2	
2-17	87-038-039-01		Wire binder		2	
2-18	82-541-280-01	1	Metal fitting, Push-button shaft	TPR-9		
2-19	82-541-298-01		Metal fitting E, Volume	TPR-9		
-20	82-545-016-01		Push-button, REC mute	TPR-9	980 1	ĺ
2-21	82-560-224-01		P-spring, Cassette up		1	
2-22	82-534-264-01		Gear, oil damp		1	
2-23	82-534-250-01		Oil damp metal fitting ass'y		1	
2-24	87-040-113-01		Counter		1	1
2-25	87-064-059-01		Holder, ECM		1	
			· ·		950 1	
2-26	82-541-275-01		Plate spring, Earth plate	TPR-9		
2-27	87-043-050-01		Rod antenna		2	
2-28	82-560-209-01		Holder ass'y, ATS knob		1	
2-29	82-560-007-01		Push-key, ATS	TDD	1	
2-30	82-541-026-01		Push-key, Stand-by	TPR-9		
2-31	82-541-231-01		Shaft, Stand-by		1	1
2-32	82-541-235-01		Metal fitting, Tweeter		4	
2-33	82-560-207-01		Slide lever, ATS switch		1	
2-34	82-560-208-01		Lever, ATS plate		1	
-35	82-560-225-01		T-spring, Change lever		1	
2-36	82-541-012-01		Reflect plate	TPR-9	950 1	
2-37a	82-573-007-01		Dial plate (H, G model only)		1	
2-37b	82-573-008-01		Dial plate (E, K model only)		1	
2-38	82-541-299-01		Metal fitting, 49mm band	TPR-9	950 1	
2-39	82-541-251-01		Lever B, Lever switch	TPR-9	950 2	
2-40	82-541-246-01	1	Shaft, Lever switch	TPR-9	950 2	
2-41	82-541-233-01		Slide lever ass'y, Sleep	TPR-S	950 1	
2-42	82-530-223-01		Lock plate		1	
2-42	82-541-250-01		T-spring, Sleep switch	TPR-9	1 - 1	
2-43	82-541-243-01	1	E-spring, Sleep lever	TPR-9		
2-45	82-534-254-01		Lock pin, Power switch lever		1	
				TOD		
2-46	82-541-043-01		Knob, Light switch	TPR-9		
2-47	82-541-244-01	1	Lever A, Lever switch	TPR-9		
2-48	82-541-308-01		Holder, Peak circuit board	TPR-9		
2-49	82-541-245-01		E-spring, Sleep metal fitting	TPR-9		
2-50	82-541-236-01		Metal fitting ass'y, Sleep	TPR-9	950 1	
2-51	82-463-088-01		Terminal plate (E, K model only)	TPR-9		-
2-52	82-541-241-01	1	Joint, Lever switch	TPR-9		1
2-53	82-416-260-01		M cushion	TPR-6	601 2	
2-54	82-541-638-01		Sield paper A	TPR-9	950 1	
2-55	82-541-061-01		Knob, 49mm band	TPR-9	950 2	
2-56	82-560-218-01		Metal fitting		1	
- 50	82-541-268-01	1	Rubber belt, Counter	TPR-9		



#### EXPLODED VIEW-3

As this is a PM-1 mechanism, the exploded view is omitted (see the supplement PM-1 mechanism adjustment manual). The exploded view bellow shows the additional mechanism of the PM-1. Also shown are the attachments of the motor and a list of such.





ty	Q'ty	Common Model	Description	Part No. Changed to	Part No.	Ref. No.
	1	TPR-950	Plate spring, Wire holder		82-541-284-01	3-1
	1		P-spring, Cassette hold		82-563-292-01	3-2
	1	TPR-950	Sield plate, Head		82-541-628-01	3-3
	1		Earth plate, EH		82-539-206-01	3-4
	1	TPR-950	Cassette lock lever	1	82-541-221-01	3-5
ri l	1	TPR-950	Oil damp lever		82-541-240-01	3-6
ı I	1	TPR-930	Cushion, Cassette Iid		82-461-319-01	3-7
	1	TPR-950	Cassette box lever ass'y		82-541-212-01	3-8
	1	TPR-950	Motor sield cap (H, G model only)			
	1	TPR-935	Motor sield cap (E, K model only)		82-541-612-01	3-9a
	1	TPR-950	Shaft, Push-button		82-551-629-01	3-9b
	1	TPR-950			82-541-216-01	3-10
	1	TPR-950	Metal fitting, Push-button		82-541-218-01	3-11
			Metal fitting, LED		82-541-273-01	3-12
	6	TPR-950	Knob, Change		82-541-229-01	3-13
	1		Wire binder		87-038-039-01	3-14
	1	TPR-950	Push-switch, PAUSE		82-541-031-01	3-15
	1	TPR-950	Push-key, STOP		82-541-030-01	3-16
	1	TPR-950	Push-key, FF	1	82-541-028-01	3-17
	1	TPR-950	Push-key, FWD	1	82-541-027-01	3-18
	1	TPR-950	Push-key, REW		82-541-032-01	3-19
	1	TPR-950	Push-key, REC		82-541-029-01	3-20
1	1	TPR-950	Push-lever, PAUSE		82-541-257-01	3-21
1.	1	TPR-950	Push-lever, STOP	1	82-541-255-01	3-22
	1 1	TPR-950	Push-lever, FF	1		
	1	TPR-950		1 .	82-541-254-01	3-23
	1	TPR-950	Push-lever, FWD		82-541-252-01	3-24
		1	Push-lever, REW		82-541-253-01	3-25
	1	TPR-950	Push-lever, REC		82-541-256-01	3-26
	6	TPR-950	E-spring, Push-key		82-541-288-01	3-27
	1		T-spring, REC lever		82-534-271-01	3-28
	1		Collar, REC lever	1	82-534-212-01	3-29
1 1	1	TPR-950	REC lever		82-541-224-01	3-30
1	1	*	P-spring, REC	1.	82-560-217-01	3-31
1	. 1	TPR-950	Circuit board supporter	1	82-541-274-01	3-32
	1		E-spring, Eject lever	1	82-560-230-01	3-33
1	1		Eject lever ass'y			
1	1		Collar, Eject lever		82-560-238-01 82-560-219-01	3-34
-	1					
		1 .	Change lever, Solenoid		82-560-206-01	3-36
	1	•	Holder, Solenoid		82-560-204-01	3-37
. 1	1	AD-6300	Thrust screw		82-385-311-01	3-38
	1		Flywheel bearing plate ass'y		82-560-201-01	3-39
1   1	1		Lock plate, Stand-by		82-560-212-01	3-40
ŧ	1		T-spring, Pause lock plate		82-560-231-01	3-41
1	1	TPR-950	P-spring, CrO, switch	1	82-541-297-01	3-42
	1	TPR-300	Shaft, CrO <sub>3</sub> selector	1 1	82-439-398-01	3-43
1	1		ATS plate		82-560-220-01	3-44
1	1		Spring, Play idler lever		82-283-289-01	3-45
1	1	TPR-950	Metal fitting, CrO, switch		82-541-296-01	3-46
	1		Pause lever ass'v	1	82-560-213-01	3-40
	1		Metal fitting, Power switch	1 1	82-560-223-01	3-47
	1 1		Brake plate ass'y			
	1	TPR-300	Lever, CrO <sub>2</sub> selector		82-560-236-01 82-439-271-01	3-49 3-50
1	1		•			
			T-spring, CrO <sub>3</sub> selector lever		82-534-266-01	3-51
	3		Motor screw, M2.6	1	87-081-483-01	3-52
	3		Rubber cushion		87-087-029-01	3-53
	1		Motor pulley		87-071-025-01	3-54
	1		Holder, Motor (H, G model only)		82-560-216-01	3-55a
	1	TPR-950	Holder, Motor (E, K model only)		82-541-316-01	3-55b



### ELECTRICAL MAIN PARTS LIST = H, G MODEL

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
≪TUNER CI	RCUIT BOAR	D SECTION≫	S6	82-541-605-11	Lever switch (MODE)
PCB-A		Tuner circuit board	SFR1,2	82-542-623-01	Semi-fixed resistor, 100KΩ-B
IC1	87-027-285-01	IC. HA-11251	SFR3,4	82-542-624-01	Semi-fixed resistor, 10KΩ-B
IC2	87-027-296-01	IC. HA-11227	SFR5	87-021-596-01	Semi-fixed resistor, 20KΩ-B
Q1	87-026-109-01	FET, 2SK49 (E2)	SFR6	82-542-612-01	Semi-fixed resistor, 200KΩ-B
Q2	89-319-232-01	Transistor, 2SC1923 (R)	0, 110	82-541-687-01	Heat sink plate
03	89-305-352-01	Transistor, 2SC535 (B)		02-041-007-01	
Q4.5	89-316-752-01	Transistor, 2SC1675 (L)			< Capacitors>
Q6	89-110-153-01	Transistor, 2SA1015 (O)	C87,88	87-015-311-01	0.1µF 10V Aluminum solid
07	89-309-455-01	Transistor, 2SC945L (Q)	C103,104	87-014-065-01	2200pF PP
D1	87-017-004-01	Diode, SD117			
D2,5	88-051-060-01	Diode, IN60	≪VOLUME	CIRCUIT BOA	RD SECTION≫
D3	87-027-097-01	Diode, IS1555	PCB-C	82-541-700-01	Volume circuit board
D4	87-027-286-01	Zener diode, HZ5C1	0.1,2	89-307-325-01	Transistor, 2SC732 (G)
L1	82-539-657-01	FM antenna coil	VR1,2,3,4	82-541-623-01	Volume, 50KΩ-A(BASS, TREBLI
L2	82-546-601-01	FM RF coil	VR5,6	82-541-646-01	Volume, 20KΩ-B (VOLUME)
L3	87-007-088-01	FM OSC coil, 21/4t			<capacitor></capacitor>
L4	87-005-101-01	FM choke coil, 2.2µH	C307,308		
L4 L5	87-005-101-01	Coil, 20µH	317,318	87-015-314-01	0.47µF 10V Aluminum solid
L6	87-006-136-01	FM quad coil	317,316	1	
L6 L7 .	82-541-675-01	SW, antenna coil	SIACK CIP	CUIT BOARD	SECTION>
		SW <sub>1</sub> , MW bar antenna coil	PCB-D		Jack circuit board
L8,9	82-541-674-01			82-541-601-11	Jack plate ass'y
L10,11	87-007-058-01	SW <sub>1</sub> , SW <sub>2</sub> OSC coil	J1~12 S15		
L12	87-007-057-01	MW OSC coil	515	82-041-627-01	Slide switch (OSC)
VC1,2,3,4	87-011-105-01	Poly-variable capacitor	≪ REC MUT	E CIRCUIT BO	OARD SECTION>
TC2,3,4,8	07 044 000 04		PCB-E	82-541-636-11	REC MUTE circuit board
TC1,5,6,7,9	87-011-099-01	Trimmer		89-318-154-01	Transistor, 2SC1815 (Y)
CF1,2	87-008-153-01	Ceramic filter	01,2		
CFT1	87-008-162-01	AM ceramic filter transformer	S8	82-541-626-01	Slide switch (REC MUTE)
IFT1	87-008-174-01	FM IFT	SDEAK CID	CUIT BOARD	CECTION'S
IFT2	87-008-164-01	AM IFT	PCB-F	82-541-630-11	
LPF1,2	87-028-038-01	Low-pass filter			Peak circuit board
SFR1	87-021-357-01	Semi-fixed resistor, 10KΩ-B	035~38	89-318-154-01	Transistor, 2SC1815 (Y)
SFR2	87-021-527-01	Semi-fixed resistor, 500Ω-B	SFR1	87-021-434-01	Semi-fixed resistor, 20KΩ-B
S1	87-031-441-01	Rotary switch (BAND SELECTOR)	SCHITCH C	IRCUIT BOAR	D SECTIONS
		< Capacitors>			
C36	87-014-045-01	330pF PP	PCB-G		Switch circuit board
C81	87-014-049-01	470pF PP	D1,2	87-027-097-01	Diode, 1S1555
C34	87-014-061-01	1500pF PP.	S7	82-541-603-01	Slide switch (TUNE/BATT)
C28	87-014-065-01	2200pF PP			
C89 .	87-015-311-01	0.1µF 10V Aluminum solid		RCUIT BOAR	
C83	87-015-320-01	0.33µF 10V Aluminum solid	⚠PCB-H		Power circuit board
			D1~4	87-027-445-01	Diode, 10E-2
≪ REC/PB C	IRCUIT BOAR	D SECTION≫	F1	87-035-144-01	Fuse, "T" 250mA
PCB-B	82-541-615-71	REC/PB circuit board		87-098-010-01	Fuse label, "T" 250mA
IC1,2	87-027-227-01	IC, TA-7215P	⚠F2	87-035-118-01	Fuse, "T" 2.5A
01,2,11,12,19	89-307-326-01	Transistor, 2SC732 (BL)		87-098-020-01	Fuse label, "T" 2.5A
20		and the second s		87-032-323-01	Fuse clamp
Q3,4,7,8,13,14		Transistor, 2SC732 (G)	≪PEAK LED	CIRCUIT BO	ARD SECTION≫
Q5,6	89-310-006-01	Transistor, 2SC1000 (BL)	PCB-I	82-541-632-11	Peak LED circuit board
Q9,10,21,22	89-318-154-01	Transistor, 2SC1815 (Y)	D1	87-027-262-01	LED, TLR-124 (+7dB)
23,24,29,30			D2	87-027-263-01	LED, TLY-124 (+3dB)
Q15,16,25,26	89-104-954-01	Transistor, 2SA495 (Y)	22	3. 027-200-01	,
Q27,28	89-318-155-01	Transistor, 2SC1815 (GR)	≪REC LED	CIRCUIT BOA	RD SECTION≫
Q31,32	89-200-562-01	Transistor, 2SB56 (B)	PCB-J		REC LED circuit board
Q39	89-404-005-01	Transistor, 2SD400 (E)	D1	82-300-622-01	LED, SLP-132B (REC)
D1,2,5,6,7,8	88-051-060-01	Diode, 1N60	51	02-300-022-01	225,021-1025 (1120)
D3,4	87-027-097-01	Diode, 1S1555	ADEC VP C	IRCUIT ROAD	RD SECTION>
D9	87-027-228-01	Zener diode, 05Z-7.5U	PCB-K		REC VR circuit board
L1,2	87-003-044-01	Trap coil			
L3	82-401-661-01	Choke coil, 600µH	VR1,2	82-541-625-01	Volume, 20KΩ-A (REC VOLUME
L4	87-003-039-01	Choke coil, 36µH	& DAL ASSOC	VP CIPCILIT	BOARD SECTION ≫
L5	82-418-612-01	Bias OSC coil	≪ BALANCE PCB-L		
S2	82-533-608-01	Slide switch (REC/PB)		82-541-671-11	Balance VR circuit board
	82-541-604-11	Lever switch (ALC, TAPE)	VR7,8	82-541-624-01	Volume, 100KΩ-A,C
S3.4					(BALANCE)



Symbol No.	Part No.	Description	Symbol No	. Part No.	Description
≪LOUNDNE	SS CIRCUIT E	BOARD SECTION>	≪MISCELL	ANEOUS≫	
PCB-M	82-541-653-01	Loudness circuit board	<b>∆</b> T1	82-555-619-01	Power transformer (H model only)
S16	82-541-644-01	Push-switch (LOUDNESS)	<b></b> ★T1	82-555-620-01	Power transformer (G model only)
		<capacitor></capacitor>	RPH	87-046-163-01	REC/PB head
C3,4	87-015-367-01	0.15µF 10V Aluminum solid	EH	87-046-127-01	Erase head
C3,4	87-010-307-01	0.15gt 104 Addininan sono	SOL1	82-560-610-21	Solenoid
CHDOME !	CIRCUIT BOA	RD SECTION≫	M	87-045-117-21	Motor
PCB-N	82-541-654-01	Chrome circuit board	LM1	87-040-111-01	Level meter L
S17	87-031-381-01	Slide switch (CrO, BIAS)	LM2	87-040-112-01	Level meter R
317	87-031-361-01	Silde switch (Groz Enver	ECM1,2	85-868-019-01	ECM, CMU-9 (B)
ME CIRCII	IT BOARD SE	CTION >>	SP1.2	82-541-685-01	Speaker (Woofer)
PCB-O	82-560-606-31	MS circuit board	SP3,4	82-560-631-01	Speaker (Tweeter)
IC1,2	87-027-538-01	IC, µPD-4069	J13	87-032-881-01	Jack, 6.3φ (PHONES)
IC3	87-027-439-01	IC, CMOS 4020	J14	82-266-214-11	DC jack (DC 9V)
IC4.5	87-027-298-01	IC. CMOS 4001 NOR		87-032-853-01	AC jack
IC6	87-027-441-01	IC. TC4029	S9	82-541-679-01	Push-switch (AFC)
IC7	87-027-422-01	IC, TC5022	S10,23	87-031-493-01	Micro switch (PLAY, MOTOR,
Q1,2,3,4,5,7	89-318-154-01	Transistor, 2SC1815 (Y)			SOLENOID)
Q6	89-110-154-01	Transistor, 2SA1015 (Y)	S11	87-031-393-01	Leaf switch (AUTO STOP)
08	89-311-623-01	Transistor, 2SC1162 (C)	S14	82-541-607-01	Slide switch (ANT SELECTOR)
Q9	89-318-156-01	Transistor, 2SC1815 (BL)	\$18,19	87-031-418-01	Micro switch (PAUSE, TIMER
D1,2,3,4,5,10	87-027-097-01	Diode, 1S1555			STAND BY)
11,13,14	07-027-007-01	51000, 101000	/\_S20	87-031-393-01	Slide switch (VOLTAGE SELECTOR
D6.7.8.9	88-052-188-11	Diode, 1S188 (FM)	S22	82-560-609-01	Push-switch (PROGRAM)
BY1	82-555-622-01	Relay		87-033-139-11	External antenna terminal
S21	82-560-608-01	Slide switch (MS/SLEEP)	D1	87-027-365-01	Diode, S5277B
SFR1	87-021-570-01	Semi-fixed resistor, 100KΩ-B			< Capacitor >
SFR2	87-021-588-01	Semi-fixed resistor, 200KΩ-B	C1,2	82-981-610-01	
		< Capacitor >			
C5	87-015-518-01	1.5µF 25V Tantalum			
	1		/∱ Sa	fety component sy	rmbol
		BOARD SECTION>	This	symbol is given t	o important parts which serve to
PCB-P	82-560-607-21	Digital IND circuit board	maint	ain the safety of t	he product, and which are made to
D1	87-027-506-01	LED (DIGITAL IND)	confo	rm to special safe	ty specifications. Therefore, when
D2	87-027-687-01	LED, SR505D (FM STEREO,	replac	ing a component	with this symbol, make absolutely

OPERATE)

conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.



#### ELECTRICAL MAIN PARTS LIST = E, K Model

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
≪TUNER CI	RCUIT BOAR	D SECTION>	S2	82-533-608-01	Slide switch (REC/PB)
CB-A	82-541-702-11	Tuner circuit board	S3,4	82-541-604-11	Lever switch (ALC, TAPE)
C1	87-027-285-01	IC, HA-11251	S5	82-541-606-11	Lever switch (FUNCTION)
C2	87-027-296-01	IC, HA-11227	S6	82-541-605-11	Lever switch (MODE)
21	87-026-109-01	FET, 2SK49 (E2)	SFR1,2	82-542-623-01	Semi-fixed resistor, 100KΩ-B
22	89-319-232-01	Transistor, 2SC1923 (R)	SFR3,4	82-542-624-01	Semi-fixed resistor, 10KΩ-B
23	89-305-352-01	Transistor, 2SC535 (B)	SFR5	87-021-596-01	Semi-fixed resistor, 20KΩ-B
24.5	89-316-752-01	Transistor, 2SC1675 (L)	SFR6	82-542-612-01	Semi-fixed resistor, 200KΩ-B
26	89-110-153-01	Transistor, 2SA1015 (O)		82-541-687-01	Heat sink plate
27	89-309-455-01	Transistor, 2SC945L (Q)			< Capacitors>
01	87-017-004-01	Diode, SD117	C109	87-015-141-01	10µF 16V Electrolytic BP
02,5	88-051-060-01	Diode IN60	C87,88,115	87-015-311-01	0.1µF 10V Aluminum solid
3	87-027-097-01	Diode, IS1555	116		
04	87-027-286-01	Zener diode, HZ5C1	C103,104	87-014-065-01	2200pF PP
L1	82-539-657-01	FM antenna coil		1	
L2	82-546-601-01	FM RF coil	≪VOLUME	CIRCUIT BOA	RD SECTION≫
L3	87-007-088-01	FM OSC coil, 2%t	PCB-C		Volume circuit board
L4	87-005-101-01	FM choke coil, 2.2µH	Q1.2	89-307-325-01	Transistor, 2SC732 (G)
L5	87-005-136-01	Coil, 20µH	VR1,2,3,4	82-541-623-01	Volume, 50KΩ-A(BASS,TREBLE
L6	87-008-182-01	FM quad coil	VR5,6	82-541-646-01	Volume, 20KΩ-B (VOLUME)
L7	82-539-651-01	SW antenna coil			< Capacitor >
L8,9	82-541-642-01	LW, MW bar antennar coil	0007.000	87-015-314-01	0.47µF 10V Aluminum solid
L10	82-573-602-01	SW OSC coil	C307,308	87-015-314-01	U.4/µP 10V Aluminum solid
L11	87-007-057-01	MW OSC coil	317,318		
L12	82-479-664-11	LW OSC coil	4 14 OK OID	CUIT BOARD	CCCTION >
VC1,2,3,4	87-011-105-01	Poly-variable capacitor			
TC2,3,7,8	87-011-105-01	Poly-variable capacitor	PCB-D		Jack circuit board
TC1,4,5	87-011-099-01	Trimmer	J1~5	82-541-639-11	Jack plate ass'y
TC6	87-011-021-01	Trimmer, IAT-54	S15	82-541-647-01	Slide switch (OSC)
TC9	85-708-604-01	Trimmer, 30P			
CF1,2	87-008-169-01	Ceramic filter			DARD SECTION≫
CFT1	87-008-150-01	AM ceramic filter transformer	PCB-E		REC MUTE circuit board
IFT1	87-008-174-01	FM IFT	Q1,2	89-318-154-01	Transistor, 2SC1815 (Y)
IFT2	87-008-164-01	AM IFT	S8	82-541-626-01	Slide switch (REC MUTE)
LPF1,2	87-028-038-01	Low-pass filter			
SFR1	87-021-357-01	Semi-fixed resistor, 10KΩ-B		CUIT BOARD	
SFR2	87-021-527-01	Semi-fixed resistor, 500Ω-B	PCB-F	82-541-669-11	
S1	82-541-688-01	Rotary switch (BAND SELECTOR)	Q35~38	89-318-154-01	Transistor, 2SC1815 (Y)
			SFR1	87-021-434-01	Semi-fixed resistor, 20KΩ-B
	1	< Capacitors>			
C36	87-014-035-01	( E op )			RD SECTION>
C34	87-014-045-01		PCB-G	82-541-701-01	
C81	87-014-049-01		D1,2	87-027-097-01	Diode, 1S1555
C33	87-014-071-01	3900pF PP	S7	82-541-603-01	Slide switch (TUNE/BATT)
C89	87-015-311-01	0.1µF 10V Aluminum solid			I .
C83	87-015-320-01	0.33µF 10V Aluminum solid	≪POWER C	RCUIT BOAR	D SECTION≫
			_^LPCB-H	87-033-137-01	
		RD SECTION>	D1~4	87-027-445-01	Diode, 10E-2
PCB-B	82-541-652-41		F1	87-035-145-01	Fuse, "T" 250mA
IC1,2	87-027-227-01	IC, TA-7215P		87-098-010-01	
Q1,2,11,12	89-307-326-01	Transistor, 2SC732 (BL)	F2	87-035-139-01	
19,20				87-098-020-01	Fuse label, "T" 2.5A
Q3,4,7,8,13,14	89-307-325-01	Transistor, 2SC732 (G)		87-032-323-01	Fuse clamp
Q5,6	89-310-006-01	Transistor, 2SC1000 (BL)			
Q9,10,21,22	89-318-154-01	Transistor, 2SC1815 (Y)	≪PEAK LEI	CIRCUIT BO	DARD SECTION>
23,24,29,30			PCB-I	82-541-667-11	Peak LED circuit board
Q15,16,25,26	89-104-954-01		D1	87-027-262-01	
Q27,28	89-318-155-01		D2	87-027-263-01	
Q31,32	89-200-562-01			1	
0.39	89-404-005-01		≪REC LED	CIRCUIT BOX	ARD SECTION>
D1,2,5,6,7,8	88-051-060-01		PCB-J		REC LED circuit board
D3,4	87-027-097-01		D1	82-300-622-01	
D9	87-027-228-01		٠,	- 000 0LZ-01	, 52. 1020 11.20
L1,2	87-003-044-01		≪REC VR	CIRCUIT BOA	RD SECTION≫
L3	82-401-661-01		PCB-K		REC VR circuit board
L4	87-003-039-01		VR1.2	82-541-625-01	
		Bias OSC coil	VIN 1,2	02-041-020-01	TOIGHIE, ZURAS-A (ITEO VOLUME

Description



Symbol No.	Part No.	Description	Symbo	ol No.
≪BALANCE		BOARD SECTION>	D1	
PCB-L	82-541-666-11	Balance VR circuit board		
VR7,8	82-541-624-01	Volume, 100KΩ-A , C (BALANCE)	C1,2	
<b>≪ LOUDNES</b>	S CIRCUIT BO	OARD SECTION>	C3	
PCB-M	82-541-653-01	Loudness circuit board		
S16	82-541-644-01	Push-switch (LOUDNESS)		
C3,4	87-015-367-01	Capacitor > 0.1µF 10V Aluminum solid		⚠ Sa This
≪ CHROMÉ	CIRCUIT BOA	RD SECTION≫		main
PCB-N		Chrome circuit board		repla
Q501,502	89-318-155-01	Transistor, 2SC1815 (GR)		sure 1
S17	87-031-381-01	Slide switch (CrO <sub>2</sub> BIAS)		
≪MS CIRCU	IT BOARD SE	CTION ≫		
PCB-0	82-560-606-31	MS circuit board		
IC1,2	87-027-538-01	ΙC, μΡΟ-4069		
103	87-027-439-01	IC, CMOS 4020		
IC4.5	87-027-298-01	IC, CMOS 4001 NOR		
IC6	87-027-441-01	IC, TC4029		
IC7	87-027-422-01	IC, TC5022		
	89-318-154-01	Transistor, 2SC1815 (Y)		
Q1,2,3,4,5,7 Q6	89-110-154-01	Transistor, 2SA1015 (Y)		
08				
	89-311-623-01	Transistor, 2SC1162 (C)		
Q9	89-318-156-01	Transistor, 2SC1815 (BL)		
D1,2,3,4,5,10 11,13,14	87-027-097-01	Diode, 1S1555		
D6,7,8,9	88-052-188-11	Diode, 1S188 (FM)		
RY1	82-555-622-01	Relay		
S21	82-560-608-01	Slide switch (MS/SLEEP)		
SFR1	87-021-570-01	Semi-fixed resistor, 100KΩ-B		
SFR2	87-021-588-01	Semi-fixed resistor, 200KΩ-B		
		<capacitor></capacitor>		
C5	87-015-518-01	1.5µF 25V Tantalum		
45101541	I CIDOLUT	DO ADD OF OTIONS		
		BOARD SECTION>		
PCB-P	82-560-607-21	Digital IND circuit board		
D1	87-027-506-01	LED (DIGITAL IND)		
D2	87-027-687-01	LED, SR505D (FM STEREO, OPERATE)		
_ ≪MISCELLA		Power transformer		
ΔT1	82-555-620-01			
RPH	87-046-163-01	REC/PB head		
EH	87-046-127-01	Erase head		
SOL1	82-560-610-21	Solenoid		
M	87-045-117-21	Motor		
LM1	87-040-111-01	Level meter L		
LM2	87-040-112-01	Level meter R		
ECM1,2	85-868-019-01	ECM, CMU-9 (B)		
SP1,2	82-541-685-01	Speaker (Woofer)		
SP3,4	82-560-631-01	Speaker (Tweeter)		
J6	87-032-881-01	Jack, 6.3¢ (PHONES)		
. J7	82-266-214-11	DC jack (DC 9V)		
<b>1</b> \_18	87-032-434-01	AC jack		
J9	82-488-656-01			
S9	82-541-679-01			
\$10,23	87-031-493-01	Micro switch (PLAY, MOTOR, SOLENOID)		
	07 004 000 04			
S11	87-031-393-01			
S14	82-541-607-01			
S18,19	87-031-418-01	Micro switch (PAUSE, TIMER STAND BY)		
∱\\$20	87-031-364-01	Slide switch (VOLTAGE SELECTO	R)	
S22	82-560-609-01	Push-switch (PROGRAM)		
V44	87-036-013-01			
	0. 000-013-01	1		

A Safety component symbol

Part No.

87-027-365-01 Diode, \$52778 | \$ < Capacitors > \$ \$2-981-610-01 \$3.3\mu F \$50V \$Electrolytic BP \$7-015-424-01 \$0.68\mu F \$25V \$Aluminum solid

This symbol is given to important parts which serve to maintain the safety of the product, and which are made conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

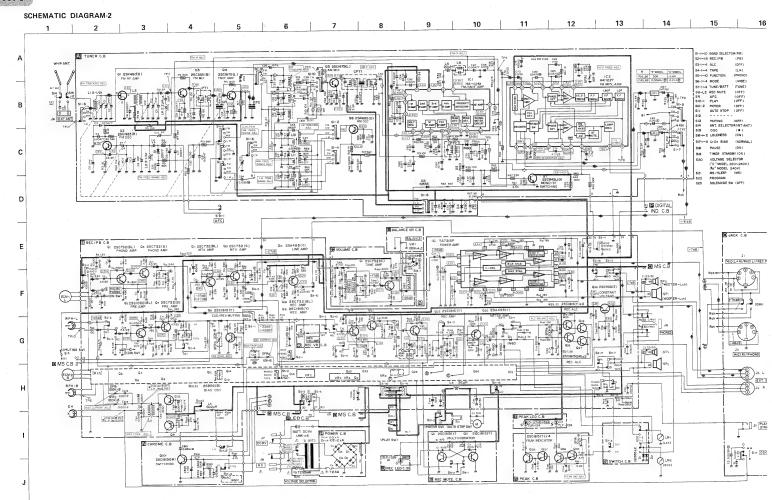


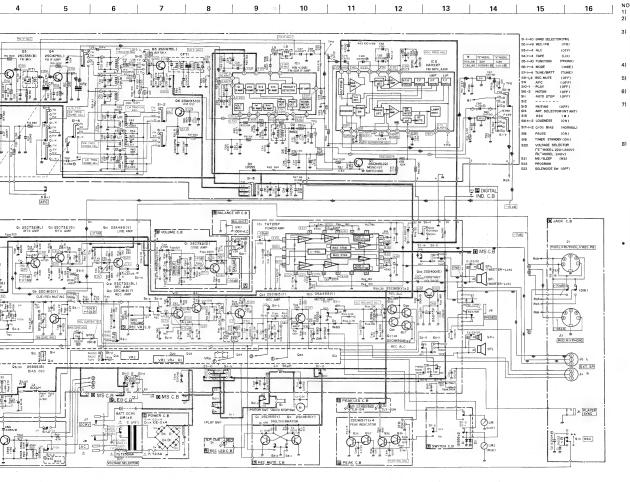
The following is the part number of the marked parts of the PM-1 mechanism.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1-13	82-385-332-11	Spring B, Head adjusting	2-50	82-439-489-01	Flywheel ass'y
1-14	87-046-163-01	Rec./pb head	2-51	82-439-314-21	Rubber belt
1-31	87-046-127-01	Erasa head	2-60	82-385-309-21	Worm gear ass'y
2-33	82-560-227-01	REC lever			
2-49	82-562-227-01	Main belt			

#### ACCESSORIES/PACKAGE

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty	
1	82-573-851-01		Printed indiv., Packing		1	-
2	82-541-852-01		Cushion L, Printed indiv.	TPR-950	1	
3	82-541-853-01		Cushion R, Printed indiv,	TPR-950	1	
4	87-051-137-11		Poly-vinyl sack (for AC power cord) (H, E, K model only)		1	
5	87-056-607-01		Poly-vinyl sack (for case)		- 1	
6a	82-573-901-21		Instructions booklet (H model only)		1	
6b	82-573-903-01		Instructions booklet (E model only)		1	
6c	82-573-904-01		Instructions booklet (K model only)		1	
6d	82-573-906-01		Instructions booklet (G model only)		1	-
7	87-051-171-11		Poly-vinyl sack (for instruction)		1	
8	82-573-902-01		Label, POP		1	
9	87-056-008-11		Label, AC power cord (K model only)	1	1	
10	87-056-009-41		Distributors list	4	1	
11	87-056-016-01		Tag, Main voltage (K model only)		1	
12	87-056-032-01		Guarantee card (G model only)		1	
13	87-056-046-01		Label, Main supply (K model only)		1	
14	87-056-535-01		Air-cap sack (G model only)		1	
15	82-916-640-01		Tape cassette, DMC-154	1 2	1 1	
16	87-032-845-01		Siemens plug (H model only)		1	
17a	87-034-880-01		AC power cord (H model only)		1	
17b	87-034-883-01		AC power cord (E model only)		1	
17c	87-034-871-01		AC power cord (K model only)	1 1	1	
17d	87-034-879-01		AC power cord (G model only)		1	
18	87-047-061-01		Battery, SUM-IAE		6	





NOTES:

1) -- B (+) power supply

2) - Signal path

Rec path, AM signal path.

The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals. ) is with AM reception or recording, An asterisk (\*) indicates that the value was measured

with a vacuum-tube voltmeter during recoriding. Resistors with no designation have a rated power of

1/4W and a tolerance of ±5%. 5) Capacitors with no designation have a dielectric

strength of less than 50WV.

The only capacitor tolerances indicated are ±5% (J) and ±10% (K),

7) Ceramic capacitor symbols:

-4⊢ For temperature compensation (SL)

-t- High dielectric constant system (YY)

→ High dielectric constant system (YW, YP, YZ)

⁴⊢ Semiconductor ceramic

-¶⊢ For temperature compensation (SH)

8) Explanation of symbols

Mylar capacitor

Aluminum solid capacitor Polypropylene film capacitor

**®** Bi-polarized capacitor

Tantalum capacitor

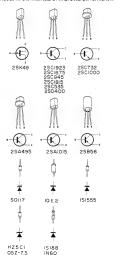
- Printed resistor

Fuse resistor

A Safety component symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

This schematic diagram is subject to change without notice in the interests of improved performance.



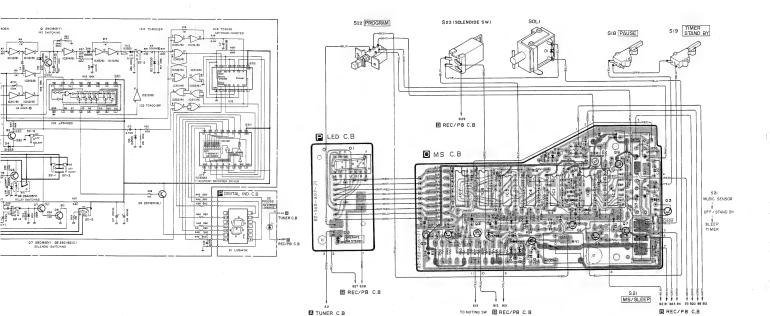
WIRING-1 SCHEMATIC DIAGRAM-1 13 15 16 11 12 10 2 S23 (SOLENOIDE SW) SOLI S22 PROGRAM C B REC/PB C.B LED C.B MS C.B ® REC/PB C.B \*27 € 1281 811118 ■ REC/PB C.B N P DIGITAL IND. C.B REC/PB C.B Q7 25CIBI5(Y) Q8 28CII62(C) SOLEMOID SWITCHING 827 828 E REC/PB C.B G TO MUTING SW E REC/PB C.B TUNER C.B

NOTES (1) BILL B(+) Pattern Will Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no sig

	_		_	-
WI	R	IN	G	-1

4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

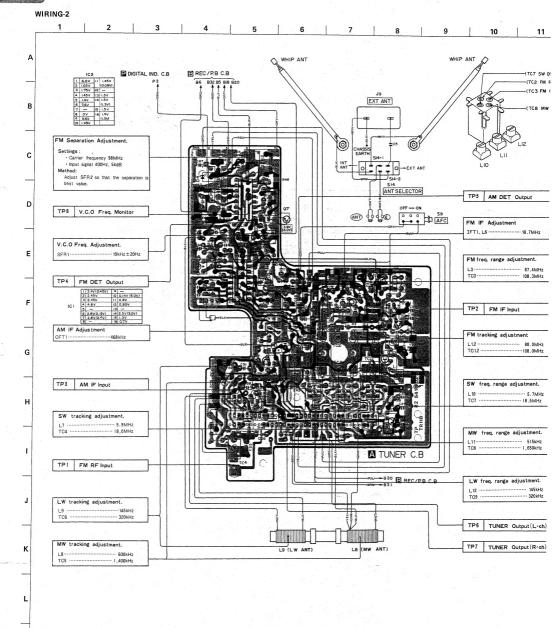


NOTES (1) B(+) Pattern (Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

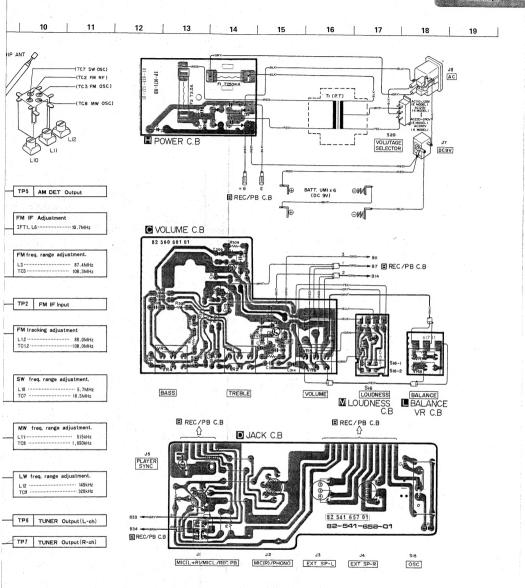


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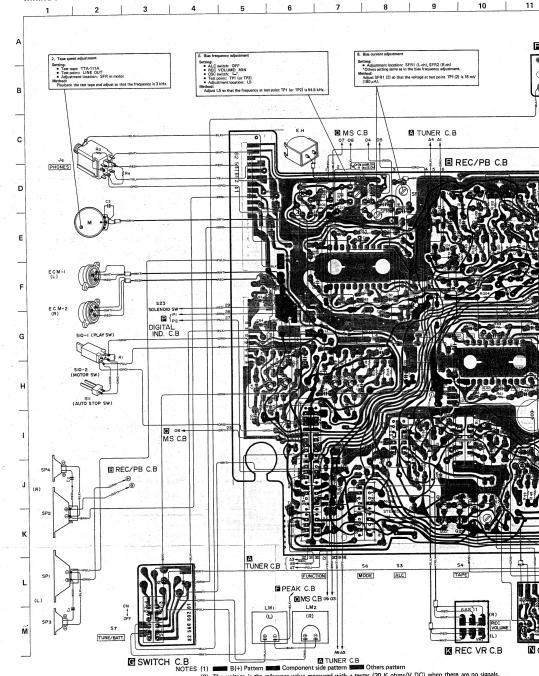


NOTES (1) B(+) Pattern Component side pattern Others pattern

<sup>(2)</sup> The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals. But ( ) is with AM reception.

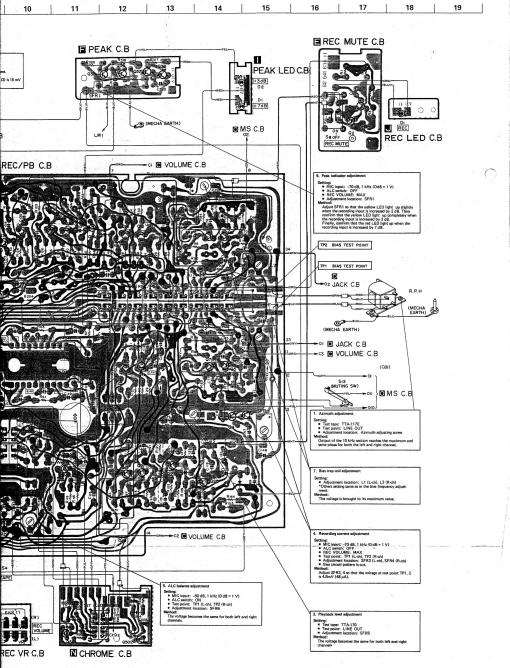


TPR-955E, K
WIRING-3



(1) De VIT return Comment and pattern Comment and pattern (2) K ohms/V DC) when there are no signals.

An asterisk (\*) indicates that the value was measured with a vacuum-tube voltmeter during recording.



e are no signals. recording.